

REMARKS

Favorable reconsideration of this application is requested in view of the following comments. Claims 1-31 remain pending.

Claims 1, 12, 13, 15 and 26-31 have been rejected as unpatentable over Kuhn in view of Hodges. Applicants respectfully traverse this rejection.

Claim 1 is directed to a method of electrochemically measuring a hematocrit (Hct) value of blood. Claim 13 is directed to an electrochemical sensor. Claim 1 requires the use of an electrode system having a working electrode and a counter electrode, with a redox substance being provided on the counter electrode but not the working electrode. The sensor of claim 13 also requires the use of an electrode system having a working electrode and a counter electrode, with a redox substance being provided on the counter electrode but not the working electrode. For purposes of this response alone, the arguments for patentability are equally applicable to the method and the device, and Applicants will argue the method and the device claims together.

The combination of Kuhn and Hodges does not suggest the inventions of claim 1 and claim 13. The rejection contends that Hodges remedies the failure of Kuhn to teach that reagent is not on the working electrode. Applicants respectfully disagree. The rejection refers to col. 6 of Hodges as teaching the placement of redox substances. However, the cited portion of the reference states: "Chemicals for use in the cell, such as redox reagents, lysing agents, buffers, and other substances, may be supported on the cell electrodes or walls, on one or more independent supports contained within cell, or may be self supporting." Here, Hodges merely teaches that various chemical entities can be provided as desired at various locations in the reaction cell. Hodges is not providing any teachings about a particular location for a specific component of the system, and certainly does not teach or hint that a redox substance, or any other substance for that matter, should be associated with a counter electrode but not associated with a working electrode as required by claims 1 and 13. Therefore, contrary to the assertion in the rejection, Hodges would not direct one of ordinary skill to provide the Kuhn system with a redox substance on a counter electrode but not on a working electrode.

Moreover, the modification suggested by the rejection would be contrary to the very principles by which the Kuhn system operates. Referring to Fig. 2 of Kuhn, the working electrode 4 and counter electrode 5 are provided on a substrate. A further substrate 3 is provided with a window 7 that provides an open area around the electrodes. A polyester mesh 9 impregnated with ferricyanide and ferrocyanide components is provided above both the working electrode and the counter electrode. See Col. 3, lines 21-33. A voltage is applied to the working electrode and the counter electrode, and the reduced ferrocyanide substance is oxidized to the ferricyanide substance at the working electrode, while the oxidized ferricyanide substance is reduced to the ferrocyanide substance at the counter electrode. See Col. 4, lines 13-28. The Hct value is determined by measuring a current generated due to oxidation from a reduced ferrocyanide to the oxidized ferricyanide. See Col. 4, lines 47-52.

Thus, the presence of the ferrocyanide and ferricyanide substances at both the working electrode and the counter electrode is a critical aspect of the Kuhn system, and nothing in Hodges in any way suggests that this essential operating principle of Kuhn should be completely changed by providing redox substance at the counter electrode but not at the working electrode as required by claims 1 and 13. At best, it might be argued that Hodges' general teachings about the potential positions of various components of the reaction system would suggest that the spacer substrate 3 in Kuhn could be modified or eliminated so that the impregnated mesh 9 could be moved closer to the electrodes, or that the ferrocyanide and ferricyanide substances could be supplied in some way besides being impregnated in the mesh 9, but Hodges in no way suggests that the substances impregnated in mesh 9 of Kuhn should be associated with the counter electrode and not with the working electrode.

Therefore, this rejection should be withdrawn. Applicants are not conceding the relevance of the references to the other features of claims 1 and 13 or the dependent claims.

Claims 7, 8, 21 and 22 have been rejected as unpatentable over Kuhn and Hodges "as evidenced by" Hasegawa. Applicants respectfully traverse this rejection. Initially, Applicants respectfully contend that the rejection relies on teachings of Hasegawa to

supplement the teachings in the other references, and therefore Hasegawa is used for more than merely showing some inherent or implicit aspect of the other references and properly should be cited as part of the rejection instead of "as evidenced by". In any event, Hasegawa does not remedy the deficiencies of Kuhn and Hodges outlined above, and this rejection also should be withdrawn. Applicants are not conceding the correctness of this rejection for claims 7, 8, 21 and 22.

Claims 2-6 and 16-20 have been rejected as unpatentable over Kuhn and Hodges in view of Winarta. Applicants respectfully traverse this rejection. Winarta does not remedy the deficiencies of Kuhn and Hodges outlined above, and this rejection also should be withdrawn. Applicants are not conceding the correctness of this rejection for claims 2-6 and 16-20.

Claim 14 has been rejected as unpatentable over Kuhn and Hodges in view of Tanike. Applicants respectfully traverse this rejection. Tanike does not remedy the deficiencies of Kuhn and Hodges outlined above, and this rejection also should be withdrawn. Applicants are not conceding the correctness of this rejection for claim 14.

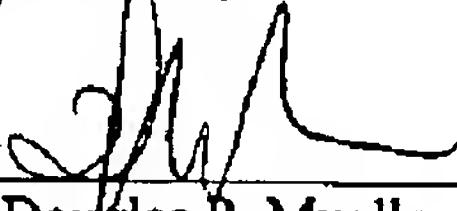
Claims 9-11 and 23-25 have been rejected as unpatentable over Kuhn and Hodges in view of Steuer. Applicants respectfully traverse this rejection. Steuer does not remedy the deficiencies of Kuhn and Hodges outlined above, and this rejection also should be withdrawn. Applicants are not conceding the correctness of this rejection for claims 9-11 and 23-25.

In view of the above, favorable reconsideration in the form of a Notice of Allowance is requested. Please charge any required fee or credit overpayment to Deposit Account No. 50-3478.

Respectfully submitted,

HAMRE, SCHUMANN, MUELLER &
LARSON, P.C.
P.O. Box 2902
Minneapolis, MN 55402-0902
(612) 455-3800

By:


Douglas P. Mueller
Reg. No. 30,300

Dated: March 1, 2010

DPM

53148

PATENT TRADEMARK OFFICE